

XXIII. *On Athalamia, a new Genus of Marchantieæ.* By HUGH FALCONER, Esq., M.D., F.R.S., F.L.S., Superintendent of the Hon. East-India Company's Botanic Garden at Calcutta, &c. &c.

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MARCHANTIEÆ.

Gen. ATHALAMIA, *Falc.*

CHAR. GEN. *Flores masculi?*

*Capituli feminei* receptaculum nullum; floribus immediatè pedunculo insertis, erectis. *Involucrum* nullum. *Involucella* tubulosa, vertice bivalvia, basi inter se connata. *Calyptra* persistens, subbifido-lacerata. *Sporangium* in lacinias 4-5, demum revolutas, dehiscens; pedicello clongato, subexserto.

Frons *simplex vel radiatim triloba, crassa, carnosa, subtùs margine squamis foliaceis pluri-seriatis instructa, lobis oblongis concavis margine attenuatis*; pedunculo pedicellisque *crassis, succulentis, teretibus.*

ATHALAMIA PINGUIS, *Falc.*

OBS. Genus *Athalamia* dictum propter flores receptaculo destitutos.

DESCR. Frond simple or radiately 3-lobed, very thick and fleshy in the centre, gradually thinning off towards the margins, of a light green colour; surface very finely and densely papillated, without pores: lobes oblong, with somewhat wavy or sinuated margins, which are slightly erect so as to give a concave section across; extremities of the lobes retuse or emarginated, with the auricles inflexed: lower surface of the same colour, bearing under the margin several rows of imbricated white lanceolate subulate leaf-like scales, which are inflexed on the surface of the frond at the terminal sinuses. Flower-stalk emitted from about the centre of the simple frond or its lobes, thick, succulent, cylindrical and smooth, of a pale green, without any kind of pubescence, or persistent paraphyses at the base. Capitulum 3-4-flowered, with no common receptaculum, the flowers being erect and immediately attached to the summit of the peduncle. *Involucrum* none. *Involucella* tubular, of rather a tough and thickish texture, slightly ventricose at the base, connate below at the axis, distinct upwards,

opening at the top into two concave valves, with the slit of dehiscence extending lower on the outside; continued downwards on the inside in a slightly-keeled ridge descending to the point of confluence. Calyptra persistent, somewhat funnel-shaped, divided vertically about half-way down into two lacerated valves, reaching about half-way up the pedicel. Sporangium globose, somewhat compressed at the sides, opening into 4, or generally 5 subequal segments, which are at first explanate, and at length revolute: in the ripe state the sporangium is just protruded beyond the summit of the involuella. Pedicel thick, smooth and cylindrical like the peduncle, fully the length of the involuella, slightly bulbous at its base where inserted on the peduncle. Spores very numerous, nearly globose, of a light brown, with the sporoderm slightly dilated into a toothleted wing beyond the nucleus, mixed with elaters.

OBS. Only seen in the ripe state, with the frond beginning to wither. The so-called male flowers were not made out. One of the lobes of the calyptra terminated by a filamentous process.

Apparently an undescribed and very distinct genus, characterized by the absence of a common receptacle and the erect flowers: most nearly allied to *Lunularia*, in the dehiscence of the sporangium and elongated pedicel.

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#### EXPLANATION OF PLATE XIX.

Fig. 1. *Athalamia pinguis*, Falc., of the natural size.

Fig. 2. One of the sporangia, with its 2-valved involuella.

Fig. 3. The same, opened to show the calyptra.

Fig. 4. A 3-flowered pedunculus, with the sporangia unopened.

Fig. 5. The same, after dehiscence of the sporangia.

Fig. 6. A sporule, with its dilated margin.